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         Jul 12
                 resulting in a closer connection to BABS
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         AUG 02
                 IFIPAT/IFIUDB/IFICDB reloaded with new search and display
                  fields
                 CAplus and CA patent records enhanced with European and Japan
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         AUG 02
                 Patent Office Classifications
                 The Analysis Edition of STN Express with Discover!
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                 (Version 7.01 for Windows) now available
                 BIOCOMMERCE: Changes and enhancements to content coverage
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         AUG 27
                 BIOTECHABS/BIOTECHDS: Two new display fields added for legal
NEWS
         AUG 27
                 status data from INPADOC
                 INPADOC: New family current-awareness alert (SDI) available
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        SEP 01 New pricing for the Save Answers for SciFinder Wizard within
                 STN Express with Discover!
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                 STN Patent Forum to be held October 13, 2004, in Iselin, NJ
NEWS 13
                 STANDARDS will no longer be available on STN
        SEP 27
NEWS 14 SEP 27 SWETSCAN will no longer be available on STN
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             MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
             AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004
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NEWS WWW
             CAS World Wide Web Site (general information)
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=> le caplus

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10614266

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=> file caplus
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SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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FILE COVERS 1907 - 29 Sep 2004 VOL 141 ISS 14 FILE LAST UPDATED: 28 Sep 2004 (20040928/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s thionyl chloride

13355 THIONYL

1002844 CHLORIDE

L1 12552 THIONYL CHLORIDE

(THIONYL (W) CHLORIDE)

=> s ll and amine

248178 AMINE

L2 651 L1 AND AMINE

anine

Suclz

=> s 12 and cis

200939 CIS

L3 16 L2 AND CIS

=> s 12 and trans

236643 TRANS

L4 20 L2 AND TRANS

=> s 13 or 14

L5 27 L3 OR L4 Oll + Orcicl = 18

=> s 15 and nataglinide

0 NATAGLINIDE

L6 0 L5 AND NATAGLINIDE

=> s 15 and 4-isopropylbenzyl chloride

4966516 4

634 ISOPROPYLBENZYL

1002844 CHLORIDE

38 4-ISOPROPYLBENZYL CHLORIDE

(4 (W) ISOPROPYLBENZYL (W) CHLORIDE)

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0 L5 AND 4-ISOPROPYLBENZYL CHLORIDE
 => 15 and carboxylic
 L5 IS NOT A RECOGNIZED COMMAND
 The previous command name entered was not recognized by the system.
 For a list of commands available to you in the current file, enter
 "HELP COMMANDS" at an arrow prompt (=>).
 => s 15 and acid
        3874803 ACID
 L8
              20 L5 AND ACID
 => d 1-20 bib abs 18
      ANSWER 1 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
 L<sub>8</sub>
 AN
      2004:428908 CAPLUS
DN
      141:7025
      Novel process for the preparation of 4-aryl-3-hydroxymethyl-1-
TΙ
      methylpiperidines.
      Reddy, Muddasani Pulla; Chowdary, Nannapaneni Venkaiah
IN
PA
      Natco Pharma Limited, India
SO
      PCT Int. Appl., 89 pp.
      CODEN: PIXXD2
DT
      Patent
LA
      English
FAN.CNT 1
      PATENT NO.
                            KIND
                                                APPLICATION NO.
                                                                         DATE
                            ----
                                                -----
          004043921 A1 ( 20040527 ) WO 2003-IN356 20031106
W: AE, AG, AL, AM, AR, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
PΙ
     WO 2004043921
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
              GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
              LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
              OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ,
              BY, KG, KZ, MD
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
              BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
              MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
              GQ, GW, ML, MR, NE, SN, TD, TG
PRAI IN 2002-MA830
                            Α
                                   20021111
os
     MARPAT 141:7025
GI
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A novel, improved, and general process for the preparation of 4-aryl-3-hydroxymethyl-1-methylpiperidines (trans-I; X = H, F, Me, OMe) is disclosed in the present invention. 4-(4-Fluorophenyl)-3-hydroxymethyl-1-methylpiperidine is a well-known intermediate in making the anti-depressant drug, paroxetine [(-)-trans -4-p-fluorophenyl-3-(3,4-methylenedioxyphenoxymethyl)piperidine]. The compds. I are prepared from the Mannich salts such as 3-dimethylamino- or 3-(N-methyl-N-benzylamino)-4'-(optionally F, Me, or OMe-substituted) propiophenone hydrochlorides (II.HCl; X = same as above; R = Me, Bn) by conventional methods. The Mannich salts II.HCl are converted into N-methyl-N-[3-[4-(optionally F, Me, or OMe-substituted)phenyl]-3-hydroxy]propylamines (III; R1 = H; X = same as above) and then reacted with Et or Me acrylate to get the corresponding Michael addition products III

(R = CH2CH2CO2R2; R2 = Et, Me; X = same as above). The hydroxy group present in the Michael addition products is converted into a facile leaving group and treated with a strong base to get 4-aryl-N-methylpiperidine-3carboxylates via (IV; X, R2 = same as above) via the intramol. cyclization in good yields. Reduction of the ester group present in these piperidine-3-carboxylates IV gives the title compds. I as crystalline solids. Present process is easily adaptable for com. preparation of the paroxetine intermediate, i.e. 4-(4-fluorophenyl)-3-hydroxymethyl-1-methylpiperidine. Thus, N-demethylation and N-methoxycarbonylation of 4-fluoro- α -(2dimethylaminoethyl) benzyl alc. by Me chloroformate in the presence of K2CO3 in CHCl3 at reflux for 15 h and hydrolysis of the resulting N-methyl-N-carbomethoxy-N-[3-hydroxy-3-(4-fluorophenyl)propyl] amine with KOH in aqueous DMSO at 100° for 6 h gave N-methyl-N-[3-hydroxy-3-(4-fluorophenyl)propyl] amine which underwent Michael addition with Me acrylate in toluene at 60-65° for 7 h to give Me 3-[N-methyl-N-[3-hydroxy-3-(4-fluorophenyl)propyl]amino]propi onate (V). Mesylation of V by mesyl chloride in the presence of Et3N in CH2Cl2 at -5° to 0° for 14-15° gave 3-[N-methyl-N-[3-(methanesulfonyloxy)-3-(4-fluorophenyl)propyl]amino]propi onate which was dissolved in DMF, cooled to -5° to 0°, treated portionwise with NaH over 1 period of 1 h, kept at the same temperature for 43 h, slowly warmed to 25° over 5-6 h, and kept at room temperature for 12 h to give trans-3-carbomethoxy-4-(4-fluorophenyl)-Nmethylpiperidine (VI). VI was reduced by NaBH4 in tert-butanol at reflux for 2 h to give trans-4-(4-fluorophenyl)-3-hydroxymethyl-1methylpiperidine.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN L_8

AN2003:909303 CAPLUS

DN140:111315

Design, Synthesis, and Biological Evaluation of Indenoisoquinoline TITopoisomerase I Inhibitors Featuring Polyamine Side Chains on the Lactam Nitrogen

Nagarajan, Muthukaman; Xiao, Xiangshu; Antony, Smitha; Kohlhagen, Glenda; ΑU Pommier, Yves; Cushman, Mark

Department of Medicinal Chemistry and Molecular Pharmacology, School of CS Pharmacy and Pharmacal Sciences, Purdue University, West Lafayette, IN, 47907, USA

Journal of Medicinal Chemistry (2003), 46(26), 5712-5724 SO CODEN: JMCMAR; ISSN: 0022-2623 PB

American Chemical Society

DTJournal

LAEnglish

The indenoisoquinolines are a class of noncamptothecin topoisomerase I AB inhibitors that display significant cytotoxicity in human cancer cell cultures. They offer a number of potential advantages over the camptothecins, including greater chemical stability, formation of more persistent cleavage complexes, and induction of a unique pattern of DNA cleavage sites. Mol. modeling has suggested that substituents on the indenoisoquinoline lactam nitrogen would protrude out of the DNA duplex in the ternary cleavage complex through the major groove. This indicates that relatively large substituents in that location would be tolerated without compromising biol. activity. As a strategy for increasing the potencies and potential therapeutic usefulness of the indenoisoquinolines, a series of compds. was synthesized containing polyamine side chains on the lactam nitrogen. The rationale for the synthesis of these compds. was that the pos. charged ammonium cations would increase DNA affinity through electrostatic binding to the neg. charged DNA backbone, and the polyamines might also facilitate cellular uptake by utilization of polyamine transporters. The key step in the synthesis involved the condensation of

Schiff bases, containing protected amine side chains, with substituted homophthalic anhydrides, to afford cis -3-aryl-4-carboxy-1-isoquinolones. These isoquinolones were then converted to indenoisoquinolines with thionyl chloride Although monoamines were much more potent than the lead compound, no significant increase in potency was observed through incorporation of addnl. amino groups in the side chain. However, one of the monoamine analogs, which features a bis(2-hydroxyethyl)amino group in the side chain, proved to be one of the most cytotoxic indenoisoquinoline synthesized to date, with a GI50 mean-graph midpoint (MGM) of 0.07 μM in the NIH human cancer cell culture screen, and topoisomerase I inhibitory activity comparable to that of camptothecin. The activity of the compds. thus prepared was compared to (4S)-4-ethyl-4-hydroxy-1Hpyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione [(20S)-camptothecin], 2,3-dimethoxy-6-methyl-5H-[1,3]dioxolo[5,6]indeno[1,2-c]isoquinoline-5,12(6H)-dione, 6-(3-aminopropyl)-2,3-dimethoxy-5H-[1,3]dioxolo[5,6]indeno[1,2c]isoquinoline-5,12(6H)-dione monohydrochloride. THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 44 ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 3 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN L8 AN2003:836829 CAPLUS DN 139:323519 Preparation of imidazoarenes as prostaglandin E2 subtype EP4 receptor TI antagonists for treatment of IL-6 involved diseases IN Shimojo, Masato; Taniguchi, Kana Pfizer Pharmaceuticals Inc., Japan; Pfizer Inc. PAPCT Int. Appl., 427 pp. SO CODEN: PIXXD2 DT Patent LAEnglish FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE --------------PΙ WO 2003086371 A2 20031023 WO 2003-IB1310 20030403 WO 2003086371 **A3** 20040603 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, AE, AG, AL, AM, AI, AU, AG, BA, BB, BG, BK, BI, BG, CA, CR, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2003236260 A1 20031225 US 2003-411491 PRAI US 2002-372364P 20030410 Р 20020412 MARPAT 139:323519 OS GΙ

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present invention relates to the use of a prostaglandin E2 (PGE2) subtype EP4 receptor ligand in the manufacture of a medicament for the treatment of interleukin 6 (IL-6) involved diseases, such as alc. cirrhosis, amyloidosis, atherosclerosis, cardiac disease, sclerosis, and

organ transplantation reactions (no data). The invention also relates to the assay which comprises culturing peripheral whole blood with a test compound and determining the effect of the compound on PGE2-induced whole blood cells activation. Three hundred eighty title compds. I [wherein Y1-Y4 = N, CH, CL; R1 = H, (un) substituted alkyl, alkenyl, alkynyl, cycloalkyl, alkoxy, pyrrolidinyl, amino, etc.; A = (un)substituted 5-6 membered (un) substituted monocyclic (hetero) aromatic ring; B = halo-substituted alkylene, cycloalkylene, alkenylene, alkynylene, alkyleneoxy, etc., optionally substituted with an oxo or alkyl group; W = amino, O, S, bond, etc.; R2 = H, OH, alkyl, alkoxy; Z = 5-12 membered (un) substituted monocyclic or bicyclic (hetero)aryl; L = halo, alkyl, haloalkyl, OH, alkoxy, haloalkoxy, alkylthio, NO2, amino, etc.] were prepared Thus, cycloaddn. of 2-[4-[(3-amino-4,6-dimethyl-2-pyridinyl)amino]phenyl]ethanol (4-step preparation given) with propionyl chloride in toluene provided 2-[4-(2-ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridin-3-yl)phenyl]ethyl propionate, which was treated with aqueous LiOH to give the ethanol derivative (86%). Chlorination (90%) using thionyl chloride, conversion to the azide (85%), and Pd/C catalyzed hydrogenation afforded the amine (94%). Coupling of the amine with p-toluenesulfonyl isocyanate in CH2Cl2 gave II (56%). The latter

significantly inhibited IL-6 secretion by PGE2 in ConA-stimulated human peripheral blood mononuclear cells (PBMC).

ANSWER 4 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN L8

AN2003:826230 CAPLUS

DN 140:28185

ΤI Induction of One-Handed Helix Sense in Achiral Poly(N-propargylamides) ΑU

Tabei, Junichi; Nomura, Ryoji; Sanda, Fumio; Masuda, Toshio

Department of Polymer Chemistry, Graduate School of Engineering, Kyoto CS University, Kyoto, 606-8501, Japan

SO Macromolecules (2003), 36(23), 8603-8608 CODEN: MAMOBX; ISSN: 0024-9297

PB American Chemical Society

DT Journal

LAEnglish

AB

Achiral N-propargylamides, i.e., N-propargyl-3-methylbutanamide (1), N-propargyl-2-ethylbutanamide (2), and N-propargyl-3,3-dimethylbutanamide (3), were polymerized with (nbd)Rh+[η6-C6H5B-(C6H5)3] to afford polymers with moderate mol. wts. (Mn = 6000-22000) in good yields. The 1H NMR and UV-vis spectra demonstrated that the polymers, poly(1)-poly(3), have stereoregular structures (cis = 100%) and equally populated right- and left-handed helical conformation. A predominant helix sense was induced in these polymers by the addition of chiral alcs. or amine, which was confirmed by CD and UV-vis spectroscopies. 1H NMR and CD spectroscopic studies strongly suggested that the poly(N-propargylamides) interacted with the chiral alcs. by hydrogen bonding at the amide groups of the polymer side chain. Chiral terpenes could also induce single-handed helical conformation. It is likely that hydrophobic interaction led to the one-handed helical conformation in the case of the chiral terpenes because the addition of n-hexane decreased the CD

THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 42 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

2003:180273 CAPLUS AN

Synthesis of (5S,6R)-4-tert-butyloxycarbonyl-5,6-diphenyl-2,3,5,6-TI tetrahydro-1,4-oxazin-2-one

ΑU Brant, Jacilynn A.; Oguz, Umut; McLaughlin, Mark L.

CS Department of Chemistry, Frostburg State University, Frostburg, MD, 21532, SO

Abstracts of Papers, 225th ACS National Meeting, New Orleans, LA, United

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States, March 23-27, 2003 (2003), CHED-554 Publisher: American Chemical
      Society, Washington, D. C.
      CODEN: 69DSA4
      Conference; Meeting Abstract
 LA
      English
 AΒ
     The target mol., (5S,6R)-4-tert-butyloxycarbonyl-5,6-diphenyl-2,3,5,6-
     tetrahydro-1,4-oxazin-2-one, can be used for the synthesis of a very large
     variety of amino acids. Our group is using these amino acids in the
     synthesis of constrained dipeptides that can function as enzyme inhibitors
     and the formation of unnaturally stable extended conformations. The first
     step of the synthesis was a syn hydroxylation of trans
     -1,2-diphenylethylene using AD-mix-\beta.
                                             Thionyl
     chloride was added to the diol and the cyclic sulfite was oxidized
     to the cyclic sulfate. Nucleophilic substitution with sodium azide
     occurred and hydrogenolysis of the resulting compound was conducted using
     10% palladium on charcoal and 40 psi of H2 in a Paar Hydrogenator to
     produce the homochiral hydroxyethylamine. The 2-amino-1,2-diphenylethanol
     and ethylglyoxalate were coupled via reductive amination in the presence
     of triacetoxyborohydride. The amine nitrogen was protected by
     Boc anhydride. Cyclization of the mol. occurred during a reaction with
     p-toluenesulfonic acid to yield the target mol.
     ANSWER 6 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
     2003:173562 CAPLUS
     138:205498
     Photoresponsive polymer, built-up type diacetylene polymer, crystals of
     ammonium carboxylates, and processes for production of them
     Matsumoto, Akikazu; Odani, Toru
     Japan Science and Technology Corporation, Japan
     PCT Int. Appl., 113 pp.
     CODEN: PIXXD2
     Patent
     Japanese
FAN.CNT 1
     PATENT NO.
                       KIND
                               DATE
                                           APPLICATION NO.
                                                                  DATE
                        ----
     WO 2003018525
                         A1
                                20030306
                                            WO 2002-JP8559
                                                                   20020826
     WO 2003018525
                         B1
                                20030918
        W: US
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,
            LU, MC, NL, PT, SE, SK, TR
     JP 2003327558
                         A2
                                20031119
                                           JP 2002-134763
                                                                   20020509
     JP 2003146944
                         A2
                                           JP 2002-201880
                                20030521
                                                                  20020710
     EP 1431266
                                           EP 2002-762855
                         A1
                                20040623
                                                                  20020826
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI, CY, TR, BG, CZ, EE, SK
PRAI JP 2001-257028
                        Α
                               20010827
    JP 2002-134763
                         Α
                               20020509
    JP 2002-201880
                         Α
                               20020710
    WO 2002-JP8559
                         W
                               20020826
    MARPAT 138:205498
    Crystals of ammonium carboxylates are produced by mixing crystals of a
    carboxyl-bearing conjugated diene such as muconic acid with at
    least one compound selected from among amines and ammonia in the absence of
    a liquid medium. The use of an amine having a bivalent group
    represented by the general formula ArN:NAr' (wherein Ar and Ar' are each
    independently a bivalent aromatic hydrocarbon group) as the above
    amine component gives a novel photoresponsive polymer which
    comprises layer crystals of a carboxyl-bearing conjugated diene polymer
    and the amine intercalated thereinto. Further, a built-up type
    diacetylene polymer is obtained by subjecting crystals of an ammonium
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carboxylate prepared from a carboxylic acid and an amine

OS

GI

MARPAT 136:85816

, at least either of which is a diacetylene derivative, to irradiation with light or heating. Thus, (Z,Z)-muconic acid and benzylamine were reacted to give muconic acid benzylammonium, which was polymerized by UV irradiation to give 2,5-polymuconic acid benzylammonium, which was thermally decomposed to give polymuconic acid, which was reacted with benzylamine to give benzylamine-intercalated polymuconic acid. RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT L8 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN AN2002:10463 CAPLUS DN136:85816 Synthesis of guanidine derivatives of quinazoline and quinoline for use in ΤI the treatment of autoimmune diseases IN Poyser, Jeffrey Philip Astrazeneca AB, Swed.; Astrazeneca UK Limited PAPCT Int. Appl., 150 pp. SO CODEN: PIXXD2 DTPatent LA English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. ---------PΙ WO 2002000644 A1 20020103 WO 2001-GB2698 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG EP 1296973 A1 20030402 EP 2001-940757 20010619 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR PRAI GB 2000-15376 Α 20000624 GB 2000-30989 20001219 Α WO 2001-GB2698 W 20010619

Title compds. I [Q1 = (un)substituted quinazolinyl and quinazolinyl-like ΑB ring; R2 = H, alkyl; R3 = H, alkyl, or R2 and R3 together form a CH2, (CH2)2 or (CH2)3 group; R5 = H, alkyl, or R5 and R6 together with the N atom to which they are attached form a 4- to 7-membered heterocyclic ring optionally containing a further heteroatom selected from 0, N and S, provided that one of the pairs of groups R2 and R4 together, R3 and R4 together and R5 and R4 together forms a bond; Q2 = aryl, arylalkyl, arylcycloalkyl, heteroaryl, heteroarylalkyl or heteroarylcycloalkyl; R6 = (un) substituted group selected from alkenyl, alkynyl, cycloalkyl and cycloalkenyl, or R6 is a substituted alkyl group, and wherein adjacent carbon atoms in any alkylene chain within a R6 group are optionally separated by the insertion into the chain of a group selected from 0, S, SO, SO2, amino, CO, etc.; or a tautomer thereof] were prepared Over 100 synthetic examples were provided. E.g., Et 3-methoxy-4-((N-methylpiperidin-4-yl)methoxy)benzoate (preparation given) was nitrated (CH2Cl2, TFA, HNO3, 0°C), the nitro group reduced (MeOH, Pt/C, 1.8 atm H2), the product condensed/cyclized (2-methoxyethanol, 115°C, 2 h) and treated with thionyl chloride to give 4-chloro-6-methoxy-7-((N-methylpiperidin-4yl) methoxy) quinazoline. This intermediate was treated with 4-bromo-2-fluorophenol (DMF, K2CO3, 100°C, 2.5 h), ammonia in isopropanol (2M, 130°C, 16 h) to give the 4-aminoquinazoline derivative which was reacted with 2-chloro-6-methylphenylisothiocyanate (DMF, NaH) to afford 1-(2-chloro-6-methylphenyl)-3-[6-methoxy-7-((N-methylpiperidin-4yl)methoxy)quinazolin-4-yl]thiourea. The thiourea was treated with 2-aminoethanol (CHCl3/MeOH, HgO, 2 h) to give example compound II. I are used in the prevention or treatment of T cell mediated diseases.

II

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L8 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1995:797785 CAPLUS
- DN 124:29833
- TI Synthesis and Reactivity of N-[Bis(trimethylsilyl)methyl]heterocumulenes AU Barbaro, Gaetano; Battaglia, Arturo; Giorgianni, Patrizia; Guerrini, Andrea; Seconi, Giancarlo
- CS Istituto CNR dei Composti del Carbonio Contenenti Eteroatomi, Bologna, 40129, Italy

```
SO Journal of Organic Chemistry (1995), 60(19), 6032-9
CODEN: JOCEAH; ISSN: 0022-3263
PB American Chemical Society
DT Journal
LA English
```

Ι

A number of N-heterocumulenes bearing the (Me3Si)2CH (BSM) substituent adjacent to the terminal N atom of the heterocumulene function, BSM-N:C:O (2), BSM-N:C:S (3), BSM-N:C:NR (4: R = BSM; 5: R = C6H5), BSM-N:C:CR1R2 (9a: R1 = R2 = C6H5; 9b: R1 = H, R2 = SiMe3; 10: R1 = R2 = CH3; 12: R1 = H; R2 = CH3), and BSM-N:S:O (14), were synthesized. The synthetic utility of the BSM-N-substituted heterocumulenes was explored through the creation of a carbanion center at the α position relative to N. In particular, the following reactions were studied: (i) the nucleophilic addition of MeLi to compds. 2 and 5, (ii) the MeLi-induced deprotonation of ketene imines 9a,b (this study includes the study of the regiochem. output of the addition of electrophiles (H2O, MeI, Me2CHI) to the resulting 1,3-dipoles to give e.g. Ph2C:C:NCMe(SiMe3)2); and (iii) the TBAF-induced desilylation of compds. 2 and 9a followed by reaction with benzaldehyde to give e.g. cis- and trans-I.

L8 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2004 ACS ON STN

AN 1994:558009 CAPLUS

DN 121:158009

TI Synthesis and transacylating reactivity of β -cyclodextrin ethylenediamines

AU Beeson, John C.; Czarnik, Anthony W.

CS Dep. Chem., Ohio State Univ., Columbus, OH, 43210, USA

SO Bioorganic & Medicinal Chemistry (1994), 2(4), 297-303 CODEN: BMECEP; ISSN: 0968-0896

DT Journal

LA\ English

AB

The synthesis of the ethylenediamine-connected cyclodextrin dimer is reported, together with the synthesis of several reference cyclodextrinylamines. Each compound displayed enhanced transacylation or transphosphorylation of activated substrates, with the primary amine-bearing monocyclodextrin compound showing the greatest activity. No special rate advantage was observed for this cyclodextrin dimer, although such effects do exist in other cyclodextrin dimers reported previously.

- L8 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1994:557423 CAPLUS
- DN 121:157423
- TI Process for the stereospecific synthesis of azetidinones
- IN Thiruvengadam, Tiruvettipuram K.; Tann, Chou-Hong; Lee, Junning; McAllister, Timothy; Sudhakar, Anantha
- PA Schering Corp., USA
- SO U.S., 15 pp. Cont.-in-part of PCT Ser. No. WO92US#5972.



AB

10614266

LA	CODEN: USXXAM Patent English CNT 5		
	PATENT NO.	KIND DATE APPI	LICATION NO. DATE
PI	US 5306817	A 19940426 US 1	1992-962768 19921019 1992-2114007 19920721 1992-US5972 19920721
	CA 2114007	AA 19930204 CA 1	1992-2114007 19920721
	WO 9302048	A1 19930204 WO 1	1992-US5972 19920721
	W: AU, BB, BG,	BR, CA, CS, FI, HU, JP,	KP, KR, LK, MG, MN, MW, NO,
	PL, RO, RU,	SD, US	
	RW: AT, BE, CH,	DE, DK, ES, FR, GB, GR.	IT, LU, MC, NL, SE, BF, BJ,
	(`H' ('(4 (')	('M (2)) (2N MI MID CINT	min ma
	AU 9223980	A1 19930223 AU 1	L992-23980 19920721
	AU 658441	B2 19950413	23320721
	ZA 9205487	A 19930331 ZA 1	992-5487 19920721
	EP 596015	A1 19940511 EP 1	992-916790 19920721
	EP 596015	B1 19971001	1992-23980 19920721 1992-5487 19920721 1992-916790 19920721
	A. AI, DE, CH,	DE, DK, ES, FR, GB, GR,	IT. LI. LU. MC NI. SE
	JP 06508637	T2 19940929 JP 1	.992-502964 19920721
	JP 2525125	B2 19960814	13320731
	HU 67341	A2 19950328 HU 1	.994-185 19920721
	AT 158789	E 19971015 AT 1	992-916790 19920721
	ES 2107548	T3 19971201 ES 1	.994-185 .992-916790 .992-916790 .992-916790 .992-916790
	CN 1069024	A 19930217 CN 1	1992-721 1992-108760 19920722 1992-550 19921229 1992-261 19921229 1994-179008 19940107
	LV 10429	B 19950820 LV 1	992-550 19921229
	LT 3369	B 19950825 LT 1	992-261 19921229
	US 6093812	A 20000725 US 1	994-179008 19940107
	110 7100221	A 19940121 NO 1	994-221 19940191
	US 5561227	A 19961001 US 1	994-265466 19940623
PRAI	US 1991-734426	B2 19910723	
	US 1991-734652	B2 19910723	
	WO 1992-US5972	A 19920721	
	US 1992-962768	A3 19921019	
	US 1994-179008		
os	CASREACT 121:157423;	MARPAT 121:157423	
GI			

AB

This invention provides an improved process for producing azetidinones. More particularly, this invention provides the steps of producing an trans-azetidinone represented by formula I or II from a carboxylic acid R2-D-CH2-COOH, an aldehyde R1-A-CHO and an amine RNH2, by the steps of: (a1) converting a carboxylic acid to the corresponding acid chloride; (b1) deprotonating a chiral oxazolidinone and treating the resulting anion with the product of step (a1); (c1) enolizing the product of step (b1) and condensing with the aldehyde; (d1) hydrolyzing the product of step (c1); (e1) condensing the product of step (d1) with the amine; and (f1) cyclizing the product of step (e1). Alternatively, the process comprises (a2) enolizing the product of step (b1) and condensing, in the presence of a Lewis acid, with a Schiff's base prepared from the aldehyde and the amine; and (b2) cyclizing the product of step (a2).

FAN.CNT 1

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L8
      ANSWER 11 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
 AN
      1991:5789 CAPLUS
 DN
      114:5789
 ΤI
      A new route to N-monosubstituted thioamides utilizing
      phosphoramidothionates as reagents for the thioamidation of carboxylic
      DeBruin, Kenneth E.; Boros, Eric E.
 AU
      Dep. Chem., Colorado State Univ., Fort Collins, CO, 80523, USA
 CS
      Journal of Organic Chemistry (1990), 55(25), 6091-8
      CODEN: JOCEAH; ISSN: 0022-3263
 DT
      Journal
 LA
      English
 os
      CASREACT 114:5789
 AΒ
      RCSNHR1 (R = alkyl, \alpha, \beta-alkenyl, cycloalkylalkyl, Ph, alkyl
      with remote keto, ester, or amido groups; R1 = Me, PhCH2, ally1) were
      synthesized in 50-80% yield from the corresponding RCOCl and R1NH2 with
      (MeO) 2P(S) Cl, which derivatizes the amine, forms the carboxamide
      bond, and thionates the carbonyl by an intramol. rearrangement.
      phosphoryl group is then cleaved from the resulting thiocarbonyl
      phosphoryl mixed imide by a simple hydrolysis. Competing thionation of
     remote carbonyl groups or epimerization of a chiral center containing a proton
      \alpha to a ketone group was not observed
rs
     ANSWER 12 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
AN
     1981:425364 CAPLUS
DN
      95:25364
     Alkaloid synthesis via intramolecular ene reactions. 1. Application to
ΤI
      (±)-crinane
ΑU
     Keck, Gary E.; Webb, Robert R., II
CS
     Dep. Chem., Univ. Utah, Salt Lake City, UT, 84112, USA
     Journal of the American Chemical Society (1981), 103(11), 3173-7
SO
     CODEN: JACSAT; ISSN: 0002-7863
DT
     Journal
LA
     English
     For diagram(s), see printed CA Issue.
GΙ
AH/
     A general approach to the cis-fused octahydroindole skeleton of
     representative Amaryllidaceae alkaloids is described. A key feature of
     the approach is the intramol. ene reaction of an acylnitroso olefin to
     give ene product I, corresponding formally to annulation of a 5 membered
     N-containing ring onto a six-membered carbocycle. The total synthesis of
     (±)-crinan (II), which contains the basic octahydroindole nucleus, is
     described. Ene product I, obtained from thermal unraveling and
     concomitant reaction of protected nitroso olefin III, was converted, in 3
     reductive steps, to octahydroindole IV. Amine IV, thus
     obtained, is cyclized via conventional Pictet-Spengler conditions or by
     exposure to Eschenmoser's salt to give II.
L8
     ANSWER 13 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
     1981:424373 CAPLUS
AN
     95:24373
DN
     Optically active 3-substituted 2-(2',2'-dihalovinyl)-cyclopropane-1-
ΤI
     carboxylic acids and their derivatives; 4-(2',2',2'-trihaloethyl)-
     cyclobutane-1-sulfonic acid salts
    Dingwall, John Grey; Greuter, Hans; Martin, Pierre; Ackermann, Peter;
IN
     Gsell, Laurenz
     Ciba-Geigy A.-G., Switz.
PΑ
     Eur. Pat. Appl., 43 pp.
SO
     CODEN: EPXXDW
DT
     Patent
LA
    German
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	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	ED 10700				
PI	EP 12722	A1	19800625		19791210
	EP 12722		19811209		
	R: AT, BE,	CH, DE, FR	, GB, IT,	NL, SE	
	FI 7903891 DD 151930	A	19800616	FI 1979-3891	19791212
	DD 151930	C		DD 1979-217653	19791213
	CA 1136636	A1	19821130		19791213
	DK 7905335	A	19800616		19791214
	DK 160546	В	19910325		
		C	19910930		
		A	19800617	NO 1979-4102	19791214
	NO 150957	В	19841008		
	NO 150957	C	19850116		
	JP 55085541		19800627	JP 1979-161703	19791214
	JP 59032455	B4	19840809		
	BR 7908212	Α	19800826		19791214
	CS 214680	P	19820528	,,, 0013	
	IL 58963	A1	19830930		
	HU 28149		19831128	HU 1979-CI1998	19791214
		В	19840928		
		A1	19801216		19791215
		A	19811110	US 1979-103983	19791217
		A	19801231	ZA 1979-6855	19791218
	NO 8002540	A	19800617	NO 1980-2540	19800827
	NO 150240	В	19840604		
	NO 150240	С	19840912		
	US 4335057	Α	19820615	US 1980-219803	19801224
PRAI	CH 1978-12784		19781215		
/_	US 1979-103983		19791217		
/ AB	Optically active	3,3-dimeth	vl-substi	tuted title acids (halo	_ hwama

Optically active 3,3-dimethyl-substituted title acids (halo = bromo or chloro in each) and carboxylate esters and sulfonate amine salts were prepared Thus, racemic 2-chloro-3,3-dimethyl-4-(2,2,2-trichloroethyl) cyclobutanone (racemic I) treated with (-)-PhCHMeNH2 (II) and SO2-H2O in MeCN gave the II salt of (±)-2-chloro-1-hydroxy-3,3-dimethyl-4-(2,2,2-trichloroethyl)-1-cyclobutanesulfonic acid, treatment of which with EtOH-HCl gave (+)-I. Treatment of (+)-I with 2.5 N NaOH at 0°, then at room temperature, gave an 83:17 mixture of cis,trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylic acid (cis,trans-III), from which purified (+)-cis-III was obtained.

L8 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1980:633342 CAPLUS

DN 93:233342

TI Structure and behavior of spermidine siderophores

AU Peterson, T.; Falk, Karl Erik; Leong, Sally A.; Klein, Melvin P.; Neilands, J. B.

CS Dep. Biochem., Univ. California, Berkeley, CA, 94720, USA

Journal of the American Chemical Society (1980), 102(26), 7715-18 CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA English

L8

The proposed structures of the microbial iron transport compds.

(siderophores) agrobactin and parabactin were confirmed by synthesis of a hydrolysis product, agrobactin A. The unusual stability of the 2-oxazoline ring of the siderophores was shown to arise from electronic effects contributed by the o-hydroxy substituent. The duplicate NMR spectra of agrobactin and parabactin were demonstrated to originate from cis-trans isomerization around the tertiary amide bonds.

ANSWER 15 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1980:6546 CAPLUS

DN 92:6546

TI Methods and intermediates for preparing cis-4-oxoazetidine intermediates

IN Gleason, John G.; Holden, Kenneth G.; Huffman, William F.

PA Smithkline Corp., USA

SO U.S., 20 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

FAN.	CNT 3				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4166816 ZA 7602265 BE 841234	A A A1	19790904 19770427 19761028	US 1977-821386 ZA 1976-2265 BE 1976-166530	19770803 19760414 19760428
	GB 1553430 US 4072674	A A	19790926 19780207	GB 1979-991 US 1976-696094	19760505
	US 4257947	A	19810324	US 1979-20293	19760614 19790314
	CH 624670 CH 627475	A	19810814	CH 1980-3792	19800514
	DK 8003003	A A	19820115 19800711	CH 1980-3793 DK 1980-3003	19800514 19800711
	DK 8003005	Α	19800711	DK 1980-3005	19800711
PRAI	DK 8003008 US 1975-574225	A	19800711 19750505	DK 1980-3008	19800711
	US 1975-626686		19751029		
	US 1976-696094 DK 1976-1947		19760614 19760430		
	CH 1976-5572		19760504		
	GB 1976-15246 US 1977-821386		19760505 19770803		
GT	 		15110003		

Ι

The reaction of RCH2COX (R = N3, acylamino; X = Br, Cl, CF3CO2) with R2N:CHCO2R1 [R1 = alkyl, PhCH2, MeOC6H4CH2, CH2CCl3; 2,4-(MeO)2C6H3CH2, 4-MeOC6H4CH2, Ph2CH, substituted benzhydryl] gave the resp. azetidinones I, which were converted to isocephems such as II; II was N-acylated [(2-thienyl)acetyl chloride] and then saponified to give a compound with bactericidal activity. The reaction product of N3CH2CO2H with 2,4-(MeO)2C6H3N:CHCO2Me was converted to I [R = NHCO2CMe3, R1 = Me, R2 = 2,4-(MeO)2C6H3CH2] which was debenzylated, the product was reduced to the alc. analog, the latter was O-tosylated; the tosylate product was treated with NaI and 4-MeOC6H4CH2SH to give a sulfide, the sulfide was converted

to mercaptan III, and the cycloaddn. reaction of III with BrCH2COCO2CH2CCl3 yielded isocepham IV. IV was treated with MeSO2Cl, and the isocephem product was deprotected to give II.

- L8 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1979:575078 CAPLUS
- DN 91:175078
- TI 1,9-Dihydroxyoctahydrophenanthrenes, 1-hydroxyoctahydrophenanthren-9-ones, and their derivatives
- IN Althuis, Thomas Henry; Harbert, Charles Armon; Johnson, Michael Ross; Melvin, Lawrence Sherman, Jr.
- PA Pfizer Inc., USA
- SO Ger. Offen., 58 pp.
 - CODEN: GWXXBX
- DT Patent
- LA German

LA	German CNT 1					
PAN.	PATENT NO.	KIND	DATE	Δ.	PPLICATION NO.	DAME
				- A	FFHICATION NO.	DATE
ΡI	DE 2849224	A1	19790517	D	E 1978-2849224	19781113
	DE 2849224	C2	19840405			
	US 4188495	Α	19800212	U	5 1977-851503	19771114
	DK 7804147	Α	19790515	DI	K 1978-4147	19780919
	CA 1097668	A1	19810317	CZ	A 1978-314035	19781024
	GB 2007665	Α	19790523	GI	3 1978-43558	19781107
	GB 2007665	B2	19820818			
	GB 2078720	Α	19820113	GI	3 1981-14313	19781107
	GB 2078720	B2	19820811			
	GB 2078721	A	19820113	GI	3 1981-14314	19781107
	GB 2078721	B2	19820811			
	GB 2079269	A	19820120	GE	3 1981-14315	19781107
	GB 2079269	B2	19830216			
	BE 871907	A1	19790510	BE	1978-191647	19781110
	SE 7811653	A	19790515	SE	1978-11653	19781110
	SE 430983	В	19831227			
	SE 430983	С	19840405			
	FI 7803456	Α	19790515	FI	1978-3456	19781113
	FI 71120	В	19860814			
	FI 71120	C	19861124			
	AU 7841521	A1	19790524	AU	1978-41521	19781113
	AU 509680	B2	19800522			
	JP 54084562	A2	19790705	JP	1978-139758	19781113
	JP 57057015	B4	19821202			
	FR 2411821	A1	19790713	FR	1978-31980	19781113
	FR 2411821	B1	19820205			
	ES 475040	A1	19791201		1978-475040	19781113
	AT 7808120	Α	19800115	AT	1978-8120	19781113
	AT 358024	В	19800811			
	IL 55930	Al	19821130	ΙL	1978-55930	19781113
	CH 635813	Α	19830429	CH	1978-11664	19781113
	NL 7811235	A	19790516	NL	1978-11235	19781114
	NL 180206	В	19860818			
	NL 180206	С	19870116			
	FR 2414035	A1	19790803	FR	1979-8769	19790406
	FR 2414035	B1	19831209			
	US 4237133	Α	19801202	US	1979-78473	19790924
	US 4268692	Α	19810519	US	1979-78475	19790924
	US 4268523	A	19810519		1979-78476	19790924
	US 4270005	Α	19810526		1979-78474	19790924
	AT 7907838	A	19810415	AT	1979-7838	19791212
	AT 364809	В	19811125			_
	US 4310529	A	19820112	US	1980-218712	19801222

	US	4310668	Α	19820112	US	1980-218966	19801222
	US	4310669	A	19820112		1980-219319	19801222
	US	4341906	Α	19820727		1980-219320	19801222
	JP	57031634	A2	19820220		1981-70593	19810511
	JP	57031635	A2	19820220		1981-70594	19810511
	JP	57031636	A2	19820220		1981-70595	19810511
	DK	8804632	A	19880818		1988-4632	19880818
	DK	8804633	A	19880818		1988-4633	19880818
PRAI	US	1977-851503		19771114			13000010
	GB	1978-43558		19781107			
	AT	1978-8120		19781113			
	JP	1978-139758		19781113			
	US	1979-78474		19790924			
	US	1979-78475		19790924			
	US	1979-78476		19790924			
os	CAS	REACT 91:175078					
GI	For	diagram(s), see p	orinted	d CA Issue.			
AB		dihydroxyoctahydi			[B =	H Me pyridul	ninowidel n

The dihydroxyoctahydrophenanthrenes I [R = H, Me, pyridyl, piperidyl, Ph, Cl- or FC6H4, R5 (R6 = H, Ph, Cl- or FC6H4; n = 1-5; m = 0-4; n + m≥5); R1 = H, PhCH2, Bz, C1-5 alkanoyl, optionally ω -substituted with an open-chain or cyclic **amine**; R2 = H, C1-6 alkanoyl, Bz; R3 = H, Me, Et; R4 = H, C16 alkyl, PhCH2; Z = C1-9alkylene, Z1Z2Z3 (Z1,Z3 = C1-9 alkylene, [C atoms in Z1 and Z3 \leq 9, Z2 = O, S, SO, SO2)], 2-hydroxyoctahydrophenanthrenones II (R's and Z the same), and 2 hexahydrophenanthrenones III (R's and Z the same), useful as analgesics, antihypertensives, tranquilizers, diuretics, immunosuppressants, antisecretory agents, and in reducing intraocular pressure in glaucoma, were prepared Thus, 3,5-(MeO)2C6H3CH2OH was converted in 5 steps to tetralone IV (R7 = R8 = H) with individual yields of 86, 50, 49, 96, and 74%, resp. Dropping IV (R7 = R8 = H) in HCO2Et into 50% NaH gave 94% IV (R7R8 = CHOH) which underwent Michael addition with MeCOCH: CH2 to give 33.5% IV (R7 = CHO, R8 = CH2CH2COMe). This was cyclized with 2N KOH in MeOH to give 50% III [R = CHMe(CH2)3Ph, R1 = CH2Ph, R3 = R4 = Me, Z = O] which, on Birch reduction, gave 56% trans-II (R's and Z the same). This was reduced with NaBH4 to give 56.5% trans-I [R = CHMe (CH2) 3Ph, R1 = R2 = H, R3 = R4 = Me, Z = O, 9β]. Analgesic activity of I and II was determined by 4 standard tests.

ANSWER 17 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN L8

1977:567762 CAPLUS AN

DN 87:167762

TICinnamic acid amides

IN Grivsky, Eugene

PAWellcome Foundation Ltd., UK

SO Ger. Offen., 34 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2704365 GB 1976-4168		19770804 19760203		*

MAB

I [R = F, Cl, Br, iodo, CF3; Rl = H, alkyl or cycloalkyl (e.g., cyclopropyl, Me2CH, Et)] (42 in all) were prepared by reaction of the corresponding trans-cinnamoyl chloride and amine.

Test data for several of the compds. as antispasmodics were given.

L8 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1969:69235 CAPLUS

DN 70:69235

TI Surface oxidation and treatment of polymers

IN Caldwell, John R.; Dannelly, Clarence C.

PA Eastman Kodak Co.

SO U.S., 5 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

The surface of a hydrophobic polymer substrate is placed in contact with a metal salt oxidation catalyst and oxidized with an O-containing gas or a peroxy compound to give an oxidized surface which, after cleaning, has sites for the formation of graft polymers. The cleaned surface can be further treated to contain acid chloride groups and may then also be treated with an amine or alc. Thus, 10 g. polypropylene (I) woven fabric was dipped into a solution of 0.0001% Mn pelargonate in PhMe and dried. The fabric was heated to 90° in a 10% solution of H2O2 for 10 min., and dried, and had a modified surface consisting of chemical bound carboxyl groups. The fabric was placed in a boiling 10% solution of SOC12 in 1,4-dioxane (II) for 30 min., dried, and further modified by immersion in a II solution of hexamethylenetetramine. The fabric obtained was readily dyeable with acid wool, acetate, and metal-chelated dyes. A sample of I powder was treated with MnCl2, oxidized by heating in air, treated with allylamine, and further treated with acrylic acid in the presence of a free-radical initiator to give molded articles which were readily dyeable and were adherent to modified rubber and neoprene adhesives. I was also oxidized in the presence of Co stearate or Co acetate, treated with ethylenediamine, and modified with MeOH, and sorbitol. Similar treatments were carried out on polyethylene, a propylene-Me acrylate copolymer, an ethylene-vinyl acetate copolymer, a terephthalic acid-trans-cyclohexane-1,4-dimethanol copolymer, a terephthalic acid-ethylene glycol copolymer, nylon 66, a polyurethane obtained from hexamethylene diisocyanate and 1,4-cyclohexane-dimethanol, and a bisphenol A polycarbonate using the materials mentioned or Cu pelargonate, ClCH2CH2Cl, propylenediamine, and diethylenetriamine, and the products were modified with glycerol, a polymeric glycol, triethylene glycol, and tetraethylene glycol.

L8 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1962:448918 CAPLUS

DN 57:48918

OREF 57:9685c-i

TI Stereochemistry of bicyclo[3.3.0]octane. I. cis
-Bicyclo[3.3.0]octane-2-carboxylic acids and -2-amines

AU Granger, Robert; Nau, Pierre; Nau, Josette

CS Fac. Pharm. Montpellier

SO Bulletin de la Societe Chimique de France (1958) 1441-6 CODEN: BSCFAS; ISSN: 0037-8968

DT Journal

LA Unavailable

Mu

OREF 55:18796e-i

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os
      CASREACT 57:48918
 AB
      cf. CA 53, 16996g; 55, 5376g. cis-cis
      -Bicyclo[3.3.0]octane-2-carboxylic acid (I) is prepared from
      cis-bicyclo[3.3.0]octan-2-one (II) via a bicyclooctene-2-
      carboxylic acid. The cis-trans acid
      is obtained by epimerization of the cis-cis
      acid. cis-cis- and cis-
      trans-Bicyclo[3.3.0]octyl-2-amines resulted from the Schmidt
      reaction on each of the acids. Nitric acid oxidation of
      cis-hydrindan-5-ol at 40° yielded cis
      -cylopentane-1-carboxylic-2-(\beta-propionic acid) (III), m.
      98-9°, in 60% yield. Dry distillation of III at 280-300° 2 hrs.
      and at 340-50° 30 min. gave II, b17 89°, b13 85°,
     n25D 1.476; semicarbazone m. 197-8°; 2,4-dinitrophenylhydrazone
      (two isomers) m. 139° and 134°; cyanohydrin b1.5
      110-12°. The residue from the distillation was extracted with hot aqueous HCl.
     On cooling, trans-cyclopentane-1-carboxylic-2-(\beta-propionic
      acid), m. 100°, precipitated Catalytic hydrogenation of II with
     Raney Ni at 85 atmospheric and 100° 2 hrs. gave cis
      -bicyclo[3.3.0]octan-2-ol (IV), b13 95°, n25D 1.4868, d2525 1.026,
     in 91% yield. Bromination of IV with PBr3 at 0° gave 63% 2-bromo-
     cis-bicyclo[3.3.0]octane, b13 86°, n21D 1.5079, d2525
     1.252. 2-Cyano-cis-bicyclo[3.3.0]octan-2-ol (15.1 g.) in 24 g.
     pyridine and 30 cc. dry ether treated with 18 g. thionyl
     chloride, the mixture refluxed with stirring 6 hrs., acidified with
     HCl, and extracted with ether yielded 89% 2-cyanobicyclo [3.3.0]octene (V),
     b15 108-10°, n22D 1.4994, d2525 0.9980. V (10 g.) was treated 48
     hrs. with 120 cc. 10% aqueous KOH, the solution washed with ether, acidified,
and
     extracted with ether to obtain bicyclo[3.3.0]octene-2-carboxylic acid
     (VI), b1 120°; amide m. 142°. Hydrogenation of VI in HOAc
     using Adams catalyst at room temperature and pressure gave
bicyclo[3.3.0]octane-
     cis-2-carboxylic acid (VII), b2 120°; amide m.
     160°; methyl ester b13 104-5°, n17.5D 1.4688, d2121 1.027.
     A solution of 1 g. methyl bicyclo[3.3.0]octane-cis-2-carboxylate in
     10 cc. 10% NaOMe was refluxed 8 hrs., diluted with 10 cc. H2O, refluxed a
     further 2 hrs., the MeOH evaporated, the mixture washed with ether, acidified,
     and extracted with ether to obtain bicyclo[3.3.0]octane-2-trans
     -carboxylic acid (VIII), b0.3 110°; amide m. 180°;
     anilide m. 113°. VII was also epimerized by heating with
     thionyl chloride in benzene. Na2CO3 (5N) was added
     dropwise with stirring to 5 g. H2NOH.HCl and 6.2 g. II in 20-30 cc. H2O until the solution was neutral to bromphenol blue. Extraction with ether
yielded
     cis-bicyclo[3.3.0]octan-2-one oxime, b13 112°, m.
     59-60°. Hydrogenation of the oxime with Raney Ni at
     70-80°/110 atmospheric 3 hrs. gave 2-amino-cis
     -bicyclo[3.3.0]octane, b17 79-80°. The benzoyl derivative of the
     amine was separated into 2 isomers, m. 125° and 128°.
     NaNO3.H2O (0.2 g.) was added slowly to 4 cc. concentrated H2SO4, 10 cc. CHCl3,
     and 0.31 g. VII with stirring below 40°. After 45 min. the mixture
     was diluted with H2O, the CHCl3 separated, and the mixture extracted with
     yield cis-2-aminobicyclo[3.3.0]octane; benzoyl derivative m.
     125°. Similarly, VIII gave trans-2-
     aminobicyclo[3.3.0]octane; benzoyl derivative m. 128°.
     ANSWER 20 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
L8
     1961:99600 CAPLUS
ΑN
DN
     55:99600
```

- TI Preparation of aminated sclareols
- AU Lazur'evskii, G. V.; Popa, D. P.
- Voprosy. Khim. Terpenov. i Terpenoidov, Akad. Nauk Litovsk. S.S.R., Trudy Vsesoyuz. Soveshchaniya Vil'nyus (1960), Volume Date 1959 89-92
- DT Journal

AB

- LA Unavailable
 - The intention was to prepare quaternary salts containing a radical with 20 carbon atoms and observe their bactericidal activity. 8,15-Di-chlorosclarene (I) and 8,13-dichlorosclarane are obtained by treating sclareol and dihydrosclareol, resp., with HCl. I with Me2NH gives 15-dimethylamino- $\Delta 8$, 13-sclarodiene (II). Under mild conditions, I and Me2NH give 8-chloro-15-dimethylaminosclarene, which on heating loses HCl to form II. Reaction of I with EtNH2 gives 15-ethylaminosclarodiene (III) or, at room temperature, 8-chloro-15-ethylaminosclarene. II or III with Etl or Mel, resp., give the quaternary ammonium salts. of the same composition but of different m.p., suggesting cis-trans isomerism. II (for subsequent quaterization) can also be obtained by treating with Me2NH the monohalo compound (15-chloro-Δ8,13-sclarodiene) contained in the mother liquor after the separation of I. The compds. described possess the ability to inhibit the fermentation of grape juice. Under similar conditions, 8,13-dichlorosclarane does not react with the amines. Under more severe conditions, a splitting takes place with this compound with the formation of hydrocarbons (sclarenes). This is explained by spatial hindrance at the chlorine atom on C-8, as a result of which, replacement by an amino group by a SN2 mechanism becomes unlikely. The chlorine on C-13 is blocked by the methyl group. N-Diterpeno-substituted piperazines are synthesized to test their anthelmintic properties. I with diethanolamine gives 15-(β -hydroxyethylamino)- $\Delta 8$,13sclarodiene, which (with thionyl chloride) gives the $bis(\beta\text{-chloroethylamino})$ analog (IV). This may possess anti-cancer properties. Condensation of IV with EtNH2 gives the N-sclarodienyl-N'ethylpiperazine. NH3 and IV give N-mono- and N,N'disclarodienylpiperazines, resp., which were characterized as the bases and hydrochlorides (no data given). Work on the synthesis of diterpenic acid esters with N-alkylethanolamines has been started to provide analogs of natural diterpenic alkaloids

FILE COVERS 1907 - 2 Sep 2004 VOL 141 ISS 10 FILE LAST UPDATED: 1 Sep 2004 (20040901/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 19

REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 12:29:43 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 7139 TO ITERATE

14.0% PROCESSED 1000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

137716 TO 147844

PROJECTED ANSWERS:

1890 TO 3250

L11 18 SEA SSS SAM L9

L12 52 L11

=> s 19 full

REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 12:29:51 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 143644 TO ITERATE

100.0% PROCESSED 143644 ITERATIONS

1410 ANSWERS

18 ANSWERS

SEARCH TIME: 00.00.01

L13 1410 SEA SSS FUL L9

L14 2911 L13

=> s 114 and thionyl chloride 13312 THIONYL

999479 CHLORIDE

12511 THIONYL CHLORIDE

(THIONYL (W) CHLORIDE)

L15 24 L14 AND THIONYL CHLORIDE

Med

=> d 1-24 bib abs 115

```
L15 ANSWER 1 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
     2004:41431 CAPLUS
AN
DN
     140:94292
    Process for preparing nateglinide and its intermediates
TI
    Yahalomi, Ronit; Shapiro, Evgeny; Dolitzky, Ben-zion; Gozlan, Yigael
IN
     Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceuticals Usa,
PA
SO
     PCT Int. Appl., 31 pp.
    CODEN: PIXXD2
DТ
    Patent
LA
    English
FAN.CNT 3
    PATENT NO.
                       KIND
                               DATE
                                         APPLICATION NO.
                                                                DATE
                        ____
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                                                                 -----
                               -----
                               20040115 WO 2003-US321238
    WO 2004005240
                        A1
                                                                20030703
PΙ
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
            TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
            CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
            NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
            GW, ML, MR, NE, SN, TD, TG
    US 2004116526
                               20040617
                                          US 2003-623237
                        A1
                                                                 20030718
PRAI US 2002-393495P
                        P
                               20020703
                        P
                               20020718
    US 2002-396904P
                         Ρ
    US 2002-413622P
                               20020925
                        Ρ
    US 2002-414199P
                               20020926
                        P
    US 2002-423750P
                               20021105
    US 2002-432093P
                        P
                             20021210
    US 2002-432962P
                        P
                             20021212
    US 2003-442109P
                         P
                               20030123
    US 2003-449791P
                        P
                               20030224
    US 2003-479016P
                        Р
                               20030616
OS
    CASREACT 140:94292
AΒ
    A process for the preparation of nateglinide involves converting
    trans-4-isopropylcyclohexanecarboxylic acid into the acid chloride by
    reaction with thionyl chloride in the presence of an
    organic amide and acylation of a suitable salt of D-phenylalanine with the
    acid chloride in a single or two phase system or in water free of a
    co-solvent.
RE.CNT 6
             THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 2 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
L15
    2003:789490 CAPLUS
AN
     140:17060
DN
     Facile Synthesis of Polyamide Dendrimers from Unprotected AB2 Building
ΤI
ΔIJ
    Washio, Isao; Shibasaki, Yuji; Ueda, Mitsuru
```

Department of Organic and Polymeric Materials, Graduate School of Science

and Engineering, Tokyo Institute of Technology, Meguro, Tokyo, 152-8552,

SO Organic Letters (2003), 5(22), 4159-4161 CODEN: ORLEF7; ISSN: 1523-7060

American Chemical Society

PB

Journal DT

CS

LΑ AB

English

A fast, inexpensive, and highly efficient synthesis of aromatic polyamide dendrimers without the need for protection and deprotection steps has been developed. Dendrons and third-generation polyamide dendrimers were easily prepared by a convergent approach involving activation of a focal point with thionyl chloride, followed by condensation with unprotected AB2 building blocks.

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 14 ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L15 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
```

AN2002:290811 CAPLUS

DN 136:310332

Poly(aryl ether ketones) bearing alkylated side chains TI

IN . Cassidy, Patrick E.; Fitch, John W., III; Gronewald, Scott D.; St. Clair, Anne K.; Stoakley, Diane M.

The United States of America as Represented by the Administrator of the PA National Aeronautics and Space Administration, USA

SO U.S., 5 pp. CODEN: USXXAM

DTPatent

English LA

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
_	US 6372877	B1	20020416	US 2000-585456	20000601

P 19990601

PRAI US 1999-136926P

This invention relates generally to poly(aryl ether ketones) bearing alkylated side chains. It relates particularly to soluble, thermally stable, low dielec. poly(aryl ether ketones) with alkylated side chains and especially to films and coatings thereof. These poly(aryl ether ketones) have the units of XC(0)XCY2XC(0) and XOXCMeRXO (X = 1,4-phenylene; Y = CF3, CH3; R = CnH(2n+1); n = 11-18). Thus, polymerization of 3.647 mmol 2,2-bis(4hydroxyphenyl)tridecane with 3.647 mmol 2,2-bis[4-(4fluorobenzoyl)phenyl]hexafluoropropane gave a polyether-polyketone having Tq 109°, inherent viscosity 1.04 dL/g in CHCl3, char yield at 800° of 50% and dielec. constant 2.46.

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L15 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
```

AN1998:804789 CAPLUS

DN 130:154196

TIShape-Selective Ligation to Dendrimer-Metalloporphyrins

ΑU Bhyrappa, P.; Vaijayanthimala, G.; Suslick, Kenneth S.

Department of Chemistry, University of Illinois at Urbana-Champaign, CS Urbana, IL, 61801, USA

Journal of the American Chemical Society (1999), 121(1), 262-263 SO CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

English LA

AΒ

The shape-selective ligation of dendrimer-metalloporphyrins derived from 2,6-di- and 3,5-di-dendron-substituted meso-tetraphenylporphinatozinc(II) complexes were studied after preparation and characterization of the complexes. Polyphenyl ester dendrimers (G1 and G2) and an amide dendrimer (G1A) were synthesized by convergent approach; the ester dendrimers, G1 and G2, were appended at all eight m-Ph positions of ZnT(3',5'-DHP)P, and amide dendrimer, G1A, at all eight of o-Ph positions of the ZnT(2',6'-DHP)P using a DCC/DPTS [dicyclohexylcarbodiimide/4-(dimethylamino)pyridinium 4-toluenesulfonate] coupling reaction. The shape selectivity f the binding sites of the Zn dendrimer-porphyrins was probed via axial ligation

of various N bases of different shapes and sizes in toluene (Zn porphyrins were chosen because they generally bind only a single axial ligand). On ligation of bases, the visible absorption spectra of Zn dendrimer-porphyrins were red-shifted and showed an increase in the extinction coefficient of both the Soret (B) and visible (Q) bands, just as with ZnTPP. The increase in binding is primarily due to attractive interactions between the ligand and the aromatic dendrons, since the increase in Keq is more pronounced for the pyridines than for simple alkylamines.

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L15 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1992:173984 CAPLUS
- DN 116:173984
- TI Synthesis of the fungicides 1-[3-(p-tert-butylphenyl)-2-methylpropyl]thiolanium perchlorate and 1-[3-(p-tert-butylphenyl)-2-methylpropyl]thianium perchlorate
- AU Wilkie, John S.; Winzenberg, Kevin N.
- CS Div. Chem. Polym., CSIRO, Clayton, 3168, Australia
- SO Australian Journal of Chemistry (1992), 45(2), 457-61 CODEN: AJCHAS; ISSN: 0004-9425
- DT Journal
- LA English
- GI



Reaction of 4-Me3CC6H4CH2CHMeCH2X [X = S(CH2)40H, S(CH2)50H], each prepared from p-tert-butylbenzoic acid, with thionyl chloride followed by treatment with silver perchlorate afforded thiolanium and thianium perchlorates I (n = 1, 2), resp. I were screened for fungicidal activity.

- L15 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1992:151670 CAPLUS
- DN 116:151670
- TI An improved method for the synthesis of 5-aryl-3-methyl-2-methylimino-1,3,4-oxadiazoles
- AU Kane, John M.; Staeger, Michael A.
- CS Marion Merrell Dow Res. Inst., Cincinnati, OH, 45215, USA
- SO Synthetic Communications (1992), 22(1), 1-11
 - CODEN: SYNCAV; ISSN: 0039-7911
- DT Journal
- LA English
- OS CASREACT 116:151670

GI

WO 9002113

W: AU, JP, KR, US

A1

19900308

```
Title compds I (R = substituted Ph) were prepared in 54-81% yields by the
AB
     mercuric oxide-induced cyclization of 1-aroyl-2,4-
     dimethylthiosemicarbazides RCONHNMeC(:S)NHMe.
    ANSWER 7 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
L15
     1992:128288 CAPLUS
AN
DN
     116:128288
     Synthetic methods and reactions. 168. Ring tert-butylation of
TI
     benzophenones and benzaldehyde with tert-butyllithium and thionyl
     chloride
     Olah, George A.; Wu, An Hsiang; Farooq, Omar
ΑU
     Donald P. and Katherine B. Loker Hydrocarbon Res. Inst., Univ. South.
CS
     California, Los Angeles, CA, 90089-1661, USA
     Synthesis (1991), (12), 1179-82
SO
     CODEN: SYNTBF; ISSN: 0039-7881
DT
     Journal
     English
LA
os
     CASREACT 116:128288
     One-flask ring tert-butylation of benzophenones and benzaldehyde with {\cal M}_{\sim}
AB
     tert-butyllithium and thionyl chloride, to give, e.g.,
     BzC6H4CMe3-p, is reported. The scope of the reaction and the suggested
    mechanism are discussed.
L15 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
     1990:515990 CAPLUS
AN
DN
     113:115990
     Copolyazomethines containing hexafluoroisopropylidene units
ΤI
     Wada, Keiichiro; Hager, William S.; Neef, Charles J.; Brewer, Keith W.
AU
     Cassidy, Patrick E.
     Dep. Chem., Southwest Texas State Univ., San Marcos, TX, 78666, USA
CS
     Polymer Preprints (American Chemical Society, Division of Polymer
SO
     Chemistry) (1990), 31(1), 350-1
     CODEN: ACPPAY; ISSN: 0032-3934
DT
     Journal
     English
LA
     Azomethine group-containing polyesters prepared from bisphenols [prepared from
AB
     4,4'-diaminodiphenyl ether and p-hydroxybenzaldehyde (I) or from
     2,2-bis[4-(4-aminophenoxy)phenyl]hexafluoropropane and I] and
     2,2-bis(4-carboxyphenyl)hexafluoropropane in presence of SOC12 or
     2,2-bis(4-chloroformylphenyl)propane were soluble in CHCl3 and stable at
     402-442° in air and at 454-474° in N.
L15 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
     1990:436398 CAPLUS
AN
     113:36398
DN
     Oxime derivatives and herbicides containing the same as an active
TI
     ingredient
     Azuma, Shizuo; Nakaqawa, Koji; Hiramatsu, Toshiyuki; Ichikawa, Yataro
IN
PA
     Teijin Ltd., Japan
     PCT Int. Appl., 148 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     Japanese
FAN.CNT 2
                        KIND
                                           APPLICATION NO.
     PATENT NO.
                                DATE
     _____
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                                           -----
                                           WO 1989-JP864
                         A1 19900308
ΡI
     WO 9001874
                                                                   19890823
         W: AU, BG, DK, FI, HU, JP, KR, NO, RO, SU, US
         RW: BE, CH, DE, FR, GB, IT, NL, SE
```

WO 1988-JP837

19880824

		RW:	CH,	DE,	FR,	GB					
	ΑU	8940	752			A1	19900323	AU	1989-40752	1	9890823
	ΑU	6190	38			В2	19920116				
	ΕP	43349	51			A1	19910626	EP	1989-909629	1	9890823
		R:	BE,	CH,	DE,	FR,	GB, IT, LI,	NL, SI	Ξ		
	JP	0450	0074			T2	19920109	JP	1989-509021	1	9890823
	z_{A}	9001	158			Α	19901128	ZA	1990-1158	1	9900215
PRAI	WO	1988	-JP8	37			19880824				
	JP	1989	-300	02			19890210				
	JP	1989	-130	002			19890210				
	WO	1989	-JP8	64			19890823				
os	MAF	RPAT :	113:3	36398	}						
GI											

$$\begin{array}{c|c}
Y \\
CR^1 = NOQR^2
\end{array}$$

Oxime derivs. I (X, Y, Z, R1, R2, R3 and Q are defined) showed excellent herbicidal effect against broad- and narrow-leaved weeds and had quick acting herbicidal activity. Preparation of these compds. by 2 different schemes is described. Thus, 3-(2-chloro-4-trifluoromethylphenoxy)phenol in CH2Cl2 was treated with TiCl4 then by dichloromethyl Me ether, and the product (2-hydroxy-4-(2-chloro-4-trifluoromethylphenoxybenzaldehyde) was refluxed with EtI, K2CO3 and MeEt ketone to give 2-ethoxy-4-(2-chloro-4-trifluoromethylphenoxy)benzaldehyde which was treated with NH2OH.HCl to give 2-ethoxy-4-(2-chloro-4-trifluoromethylphenyoxy)benzaldehyde oxime (I R1 = R2 = H; R3 = Et; X = CF3; Y = Cl; Z = CH:) (II). Formulations of II at 0.5 kg/h were 100% effective against Abutilon theophrosti. I (R1 = R2 = H; R3 = CH(Me)CO2Me; X = CF3; Y = Cl; Z = -CH:) was 100% effective against Chenopodium album centrorubrum, Aranthus mangostanus, Astragalus sinicus, A. theophrosti, Solanum nigrum, and Xanthium strumarium.

Ι

- L15 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1989:534844 CAPLUS
- DN 111:134844
- TI Copoly (imidine amides)
- AU Cassidy, Patrick E.; Farley, James M.; Mores, Maryanne
- CS Dep. Chem., Southwest Texas State Univ., San Marcos, TX, 78666, USA
- SO Polymeric Materials Science and Engineering (1989), 60, 299-303 CODEN: PMSEDG; ISSN: 0743-0515
- DT Journal
- LA English
- AB Polycondensation of 3,5-dibenzylidenepyromellitimide with 4,4'-oxydianiline or m-xylylenediamine and with 2,2-bis(4-chloroformylphenyl)hexafluoropropane or 2,2-bis(4-chloroformylphenyl)propane gave 4 polyimidine-polyamides in high yields. Tough, transparent films stable to 400-515° (in N2) could be cast from the polymer solns. All of the copolymers were soluble in m-crasol and polar aprotic solvents.
- L15 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1989:478697 CAPLUS
- DN 111:78697
- TI Polymers derived from hexafluoroacetone: 12F-poly(ether ketone)
- AU Tullos, Gordon L.; Cassidy, Patrick E.; St. Clair, Anne K.

- CS Dep. Chem., Southwest Texas State Univ., San Marcos, TX, 78666, USA
- SO Polymeric Materials Science and Engineering (1989), 60, 310-15 CODEN: PMSEDG; ISSN: 0743-0515
- DTJournal
- LA English
- AB F-containing polymers prepared by polymerization of 2,2-bis[4-(4fluorobenzoyl)phenyl]propane (I) with bisphenol AF (II), or by polymerization
- of 2,2-bis[4-(4-fluorobenzoyl)phenyl]hexafluoropropane (III) with II or bisphenol A (IV) had higher glass temps. than I-IV copolymers. II-III copolymers had mech. properties similar to PEEK, and, unlike the latter, was optically transparent at 400-500 nm, soluble in common organic solvents, and
- formed films upon casting from solution
- L15 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1986:109513 CAPLUS
- DN 104:109513
- ΤI Syntheses and chemical properties of novel 1,3-oxathiolan-5-one derivatives
- ΑU Ogawa, Kazuo; Yamada, Shozo; Terada, Tadafumi; Yamazaki, Tomio; Honna, Takaji
- CS Res. Inst., Taiho Pharm. Co., Ltd., Tokushima, 771-01, Japan
- SO Chemical & Pharmaceutical Bulletin (1985), 33(6), 2256-65 CODEN: CPBTAL; ISSN: 0009-2363
- DTJournal
- LA English
- OS CASREACT 104:109513
- GΙ

III

II

- AB Alkylidenearylidene-1,3-oxathiolan-5-ones I (R = 3-methyl-5-isoxazolyl, Ph, p-tolyl, 4-MeOC6H4, 3,4-methylenedioxyphenyl, ClC6H4; R1 = H, Me, Et) and diarylidene-1,3-oxathiolan-5-ones II (R2 = H, Me; R3 = H, Pr, PhCH2, ClC6H4, PhO, 2-naphthyl, cyclohexylmethyl, CH2CH2CH2CO2Me) were synthesized by treating RCH:C(SH)CO2H with (R1CH2CO)2O or by treating 4-MeC6H4CH:C(CO2H)SCOCHR2R3 with SOCl2 in DMF. Basic hydrolysis and methanolysis of I and II in the presence of LiOH easily occurred to give ring-cleaved products. The catalytic hydrogenation of the two olefinic bonds of II in the presence of 10% Pd/C proceeded without ring cleavage to give 1,3-oxathiolan-5-ones II. The oxidation of I and II with m-chloroperbenzoic acid afforded the corresponding 1,3-oxathiolan-5-one S-oxide derivs.
- L15 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
- AN1985:5705 CAPLUS
- DN 102:5705

TIω-(Benzhydrylideneamino)alkanoic acids

Kaplan, Jean Pierre IN

PΑ Synthelabo S. A. , Fr.

Fr. Demande, 13 pp. Addn. to Fr. Demande Appl. No. 81 21559. SO

CODEN: FRXXBL

DTPatent

LΑ French

FAN.	CNT 7				
	PATENT NO.		DATE	APPLICATION NO.	DATE
ΡI	FR 2535318	A2	19840504	FR 1982-18193	19821029
	FR 2535318		19850906		
	FR 2516509		19830520	FR 1981-21559	19811118
	FR 2516509		19850726		
		Α	19830519	FI 1982-3925	19821116
	NO 8203824	A	19830519	NO 1982-3824	19821116
	BE 895042	A1	19830517	BE 1982-209495	19821117
	SE 8206548	A	19830519	SE 1982-6548	19821117
	DK 8205117	Α	19830519	DK 1982-5117	19821117
	AU 8290645	A1	19830526	AU 1982-90645	19821117
	JP 58092646	A2	19830602	JP 1982-202836	19821117
	GB 2111051	A1	19830629	GB 1982-32766	19821117
	GB 2111051	B2	19850710		
	ES 517428	A1	19830816	ES 1982-517428	19821117
	ZA 8208470	Α	19830928	ZA 1982-8470	19821117
	HU 30787	0	19840328	HU 1982-3686	19821117
		В	19860128		
	CH 653011	Α	19851213	CH 1982-6711	19821117
	IL 67283		19860429	IL 1982-67283	19821117
	CA 1204773	A1	19860520	CA 1982-415782	19821117
	NL 8204462	Α	19830616	NL 1982-4462	19821118
	US 4588748	Α	19860513	US 1984-654068	19840925
PRAI	FR 1981-21559		19811118		
	IL 1976-50019		19760712		
	US 1982-442020		19821116		
os	CASREACT 102:5705				
GI					

$$R^2$$
 $C=N(CH_2)_nCOR^3$
 R^1

Acids and derivs. I [R = H, Me; R1 = OMe, alkyl; R2 = halo, Me; n = 1, 2,3, 4; R3 = NH2, OH, OM (M = alkali metal, 1/2 alkaline earth metal)], useful as antidepressants and anticonvulsants (no data), were prepared GABA was treated with 5-chloro-2-hydroxy-3-methyl-4'-ethylbenzophenone and NaOEt in EtOH to give I (R = H, R1 = 4-Et, R2 = 5-Cl, n = 3, R3 = OH).

L15 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

Ι

AN 1984:138901 CAPLUS

DN 100:138901

TI Dipole-stabilized carbanions: the α' lithiation of piperidides

AU Beak, Peter; Zajdel, William J.

CS Dep. Chem., Univ. Illinois, Urbana, IL, 61801, USA

SO Journal of the American Chemical Society (1984), 106(4), 1010-18

CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA English

OS CASREACT 100:138901

GΙ

AB The α' lithiation and subsequent electrophilic substitution of I (R = H, Me3C; R1 = H) gave I [R = same, R1 = e.g., D, PhCH(OH)], which cannot be cleaved. Similar reactions of Et3CCONEt2 and II (R2 = H, Ph; R3 = H) gave products which can be cleaved to the substituted amines. sequence thus provides the $(\alpha$ -lithioalkyl)alkylamine synthetic equivalent from secondary amines. The addition of α' -lithiated II (R2 = Ph, R3 = H) to aldehydes provides equatorial substitution with erythro and threo isomers of the amido alc. II [R2 = Ph, R3 = PhCH(OH)] produced in a 1:1 ratio. Exclusive conversion to an equatorial threo amino ester III is observed on treatment with strong acid. All four possible equatorial-axial and erythro-threo isomers of the amino alc. IV can be obtained by appropriate manipulations. The formations of the equatorially-substituted products from I (R = Me3C, R1 = H) and II (R2 = Ph, R3 = H) and of syn products from V consistent with oxygen-lithium complexation and dipole stabilization as important factors in α' lithiation.

L15 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1984:22210 CAPLUS

DN 100:22210

TI Kinetic effect of a hydrogen bond in the reaction of substituted benzoic acids with thionyl chloride

AU Vulakh, E. L.; Nemleva, S. A.; Ivanova, V. M.; Kaminskaya, E. G.; Gitis, S. S.

- Vses. Nauchno-Issled. Proektn. Inst. Monomer., Tula, USSR CS
- Zhurnal Organicheskoi Khimii (1983), 19(9), 1898-906 SO CODEN: ZORKAE; ISSN: 0514-7492
- DT Journal
- LA Russian
- AB A kinetic and IR spectral study of the chlorination of RC6H4CO2H (I; R = 3-NO2, H, 3-Me, 4-Me, 4-Me2CH) by SOC12 indicated that the dimeric association of I is the active substrate.
- L15 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
- AN1983:504532 CAPLUS
- 99:104532 DN
- Kinetic effect of hydrogen bonding in the chlorodehydroxylation of TIcarboxylic acids by thionyl chloride
- Vulakh, E. L.; Nemleva, S. A.; Ivanova, V. M.; Kaminskaya, E. G.; Gitis, ΑU
- CS Vses. Nauchno-Issled. Proektn. Inst. Monomerov, Tula, USSR
- Doklady Akademii Nauk SSSR (1983), 270(2), 333-6 [Chem.] SO CODEN: DANKAS; ISSN: 0002-3264
- DTJournal
- LΑ Russian
- IR bands were examined for free and H-bonded RC6H4CO2H (I; R = 3-Np2, /H, AB 4-Me, 4-Me2CH), both individually and in mixed pairs, and rate coasts/. were determined for the chlorodehyroxylation of these individual and mixed I.

 H bonding increased the reactivity of I. In mixed association the reactivity of the 2 partners tended to become equalized.
- L15 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
- 1983:487849 CAPLUS AN
- 99:87849 DN
- TI1.4-Naphthoquinones and their veterinary formulations
- IN Hudson, Alan Thomas; Randall, Anthony Winchester
- PΑ Wellcome Foundation Ltd., UK
- SO Eur. Pat. Appl., 27 pp. CODEN: EPXXDW
- DTPatent
- English T.A
- EVI CINE.

FAN.C	NT 2				
I	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
I	EP 77550 EP 77550 EP 77550	A3	19830427 19830928 19850710	EP 1982-109568	19821015
-	R: BE, CH, DE,			, SE	
I I	US 4485116 FI 8203531 FI 78677 FI 78677	A A B	19841127 19830417 19890531 19890911	US 1982-433866 FI 1982-3531	19821013 19821015
I	DK 8204597 DK 168567	Α	19830417 19940425	DK 1982-4597	19821015
	GB 2111047 GB 2111047	A1	19830629 19851023	GB 1982-29502	19821015
	HU 29139 HU 196354		19840130 19881128	HU 1982-3282	19821015
	JP 59020241 JP 03020376		19840201 19910319	JP 1982-181200	19821015
(CA 1205082	A1 :	19860527	CA 1982-413564	19821015
	SU 1324585		19870715	SU 1982-3503935	19821015
	ZA 8307581		19840627	ZA 1983-7581	19831012
	FI 8602616		19860618	FI 1986-2616	19860618
	FI 78678		19890531		
1	FI 78678	C :	19890911		

PRAI	GB 1981-31206	19811016
	GB 1982-20680	19820716
	FI 1982-3531	19821015
	US 1983-523613	19830817
os	CASREACT 99:87849	
GT		

$$\begin{array}{c} O \\ CH_2 \\ OH \end{array}$$

- AB (Cyclohexylmethyl) naphthoquinones I (R=C1-10 alkyl) were prepared, and they showed protozoacidal activity with respect to theileriosis.
 4-tert-Butylcyclohexaneacetic acid reacted with 2-chloro-1,4-naphthoquinone, and the 2-cyclohexylmethyl-3-chloro-1,4-naphthoquinone intermediate was heated with KOH to give I (R=Me).
- L15 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1981:191544 CAPLUS
- DN 94:191544
- TI Diastereoselection in the decarbalkoxylation reaction. Effect of nonbonded ring oxygens in the reactions of geminal diesters

Ι

- AU Banks, Harold D.
- CS Dep. chem., Univ. Bridgeport, Bridgeport, CT, 06602, USA
- SO Journal of Organic Chemistry (1981), 46(8), 1743-5 CODEN: JOCEAH; ISSN: 0022-3263
- DT Journal
- LA English
- OS CASREACT 94:191544

GI

- AB The effect of nonbonded ring O on stereoselectivity in the decarbalkoxylation (LiCl in wet DMSO) of geminal diesters was studied. While 1,3-dioxane derivative I (R = CHMe2, X = O) produced predominantly the cis monoester, cyclohexane derivative I (R = CMe3, X = CH2) gave virtually no diastereoselection. Bicyclo[2.2.1]heptane diester II gave essentially the same result as its 7-oxa derivative
- L15 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1979:72016 CAPLUS
- DN 90:72016
- TI Labeling of a new fungicide with tritium and carbon-14; synthesis of S-n-butyl S-p-tert-butylbenzyl-14C N-3-pyridyldithiocarbonimidate

(Denmert)

- AU Yoshitake, Akira; Kamada, Takeshi; Nakatsuka, Iwao; Miyake, Kunio
- CS Inst. Biol. Sci., Sumitomo Chem. Co., Takarazuka, Japan
- SO Radioisotopes (1978), 27(6), 324-5 CODEN: RAISAB; ISSN: 0033-8303
- DT Journal
- LA English
- AB Denmert labeled with 14C at the α position of the benzyl radical was obtained in 63% yield by sequential carboxylation of p-tert-BuC6H4MgBr with 14CO2, reduction with LiAlH4, chlorination with SOCl2, and condensation with S-Bu N-3-pyridyldithiocarbamate.
- L15 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1977:406897 CAPLUS
- DN 87:6897
- TI N-(Benzimidazol-2-yl)arylcarboxamides as ultraviolet light absorpers
- IN Grier, Nathaniel
- PA Merck and Co., Inc., USA
- SO U.S., 12 pp. CODEN: USXXAM
- DT Patent
- LA English
- FAN. CNT 2

PAIN.CIVI Z				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
			/	
PI US 4011236	Α	19770308	US 1975-580847	19750527
US 3907700	Α	19750923	US 1973-320231	19730102
PRAI US 1968-758601		19680909		
US 1973-320231		19730102		
GI				

- N-(Benzimidazol-2-yl)arylcarboxamides (I, R1 = aromatic radical with 1-3 nuclei, ring-substituted aromatic radical, aromatic heterocyclic radical; R2 = H, Me, aliphatic or aromatic acyl) were prepared by condensing an aminobenzimidazole with an aromatic acid halide. These compns. are useful as UV light absorbers in plastics, fibers, sun tan lotions, etc. Thus, p-tert-butylbenzoic acid [98-73-7] was chlorinated with thionyl chloride to give p-tert-butylbenzoyl chloride [1710-98-1], which was condensed with 2-aminobenzimidazole [934-32-7] to give N-(benzimidazol-2-yl)-4-tert-butylbenzamide (I, R1 = 4-tert-butylphenyl, R2 = H) [25737-69-3].
- L15 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

Ι

- AN 1975:513321 CAPLUS
- DN 83:113321
- TI Reaction of substituted benzoic acids with thionyl chloride
- AU Vulakh, E. L.; Freidlin, E. G.; Gitis, S. S.
- CS Vses. Nauchno-Issled. Proektn. Inst. Monomerov, Tula, USSR
- SO Zhurnal Organicheskoi Khimii (1975), 11(7), 1481-6 CODEN: ZORKAE; ISSN: 0514-7492
- DT Journal

- LA Russian
- AB The kinetics, including activation parameters, of the reaction of 17 substituted benzoic acids with SOCl2 in SOCl2 as solvent were determined at 40-60°; there was an isokinetic relationship with an isokinetic temperature 365°K. The substituent effect on the rate constant correlated with the Yukawa-Tsuno equation. There was a primary deuterium kinetic isotope effect. The mechanism was discussed.
- L15 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1975:443012 CAPLUS
- DN 83:43012
- TI Benzylamines
- PA Merck and Co., Inc., USA
- SO Austrian, 17 pp. CODEN: AUXXAK
- DT Patent
- LA German
- FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI AT 317881 PRAI AT 1971-861	В	19740925 19710202	AT 1971-861	19710202

- GI For diagram(s), see printed CA Issue.
- AB The benzylamines I (R, R1, and R2 = H, Me; substatuent position 2 or 4) were prepared by the fluorination of PhZC6H4CR2NR1R2 [II; R, R1, and R2 as above; Z = -CCl2Cl2-, -CCl:CH-, -CF:CF-, -CH(CF2H)-, -CH2CH2-] in liquid HF in the presence of HgF2, AgF, or Pb oxide. Various methods for the preparation of II were described.
- L15 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1974:519445 CAPLUS
- DN 81:119445
- TI Hofmann elimination of a tertiary amine salt in the cyclohexane series
- AU Sicsic, Sames; Welvart, Zoltan
- CS Groupe Rech., CNRS, Thiais, Fr.
- SO Bulletin de la Societe Chimique de France (1974), 7-8, Pt. 2, 1477-8 CODEN: BSCFAS; ISSN: 0037-8968
- DT Journal
- LA French
- GI For diagram(s), see printed CA Issue.
- AB The axial dimethylammonium compound (I) underwent Hofmann degradation while the equatorial epimer (II) did not. A mechanism was discussed.
- L15 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1973:536852 CAPLUS
- DN 79:136852
- TI N, N'-Alkylenebis (4-substituted benzamides)
- IN Lesher, George Y.
- PA Sterling Drug Inc.
- SO U.S., 6 pp.
 - CODEN: USXXAM
- DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3761509	A	19730925	US 1971-119028	19710225
PRAT	US 1968-756403		19680830		

- GI For diagram(s), see printed CA Issue.
- AB The title compds. (I; R = C1-6 alkyl, CF3, CC13, SCF3, SCC13, alkylamino, dialkylamino; R1 = H, C1-6 alkyl; n = 7-10) having adrenal hypertrophy at 50-100 mg/kg-day and antifertility activity at 100-400 mg/kg-day in rats

were prepared Thus, 4-EtC6H4COCl from 30 g acid was treated with 11.7 g 1,7-heptanediamine in 10% aqueous KOH and ClCH2CH2Cl to give 25.7 g I (R = Et, R1 = H, n = 7). Similarly prepared were 28 other I.

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